CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 97-114

FINAL SITE CLEANUP REQUIREMENTS DESIGNATING A CONTAINMENT ZONE AND RESCISSION OF ORDERS 90-114, 91-112 AND 93-150 FOR:

PACCAR INCORPORATED, AND
GEORGIA-PACIFIC CORPORATION

for the property located at

38801 CHERRY STREET
NEWARK
ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the Board) finds that:

1. **Site Location and description**: The 36-acre site is located at 38801 Cherry Street in Newark, Alameda County, and is approximately 2.5 miles northeast of San Francisco Bay (see Figure 1). Three buildings are situated on the northern portion of the site, and the southern portion of the site consists of asphalt and concrete pavement. Land use of surrounding areas are industrial and residential. The site is zoned for industrial use, and future use of the site is expected to be industrial. The proposed containment zone area occupies approximately 3.44 acres of the whole site (see Figure 2).

2. **Site History**: From 1962 until October 1986, Peterbilt Motors Company assembled trucks at the site, and thereafter, the site was used for office space, storage, warehousing, and as an engineering prototype test facility until October 1993. During the late 1980s and early 1990s, Peterbilt closed the manufacturing and waste management areas. Effective in 1994, property management and remediation responsibilities were transferred to Peterbilt's parent company, PACCAR Incorporated. Between October 1993 and October 1995, the site was used primarily by PACCAR for warehousing and shipping. On December 11, 1995, the site was sold to Georgia-Pacific Corporation, which currently operates a rail-to-truck wood products distribution facility at the site.

3. **Regulatory Status and Compliance**: The Board previously adopted Site Cleanup Requirements (Order No. 90-114), on August 15, 1990. Order 90-114 was amended by Order 91-112 on July 17, 1991, and by Order 93-150 on November 19, 1993. PACCAR and Peterbilt Motors have complied with all tasks outlined in these Orders.

   By the letter of August 5, 1996, PACCAR requested the Board consider a Containment Zone for the portion of the site which contains pollutants above water quality objectives (see Specification 2 below).

4. **Named Dischargers**: PACCAR is named a discharger because it owned and operated the Peterbilt Motor assembly business at the site when pollutants were discharged. George-Pacific is also named a discharger as it is the current site owner.

   As part of the December 1995 property sales agreement, PACCAR is responsible for performing activities related to remediation at the site until December 1997. Between December 1997 and December 2002, George-Pacific will be responsible for continuing these activities with PACCAR reimbursing some of the costs of work. After 2002, Georgia-Pacific (or its successor) is solely responsible for implementing and financing any activities related to site remediation. Board staff have discussed this with both PACCAR and Georgia-Pacific, and, after reviewing their submittals demonstrating their financial capabilities to take corrective action and to implement the August 25, 1997 Containment Zone Management Plan (CZMP), have no objection to the proposed arrangement.

5. **Site Hydrogeology**: The site is located within the Niles groundwater subarea. The shallow subsurface stratigraphic units are the shallow zone, the Newark Aquitard, and the Newark Aquifer. The groundwater gradient in the shallow zone is generally towards the south. The Newark Aquitard occurs from the base of the shallow zone (28 feet below ground surface [bgs]) to 54 feet bgs. The Newark Aquifer occurs from the base of the Newark Aquitard (54 feet bgs) to 72 feet bgs. These depths are approximate measurements only.

6. **Site Investigations and Remedial Actions**: There were three major phases of investigations performed at the site from 1983 to 1995. These investigations addressed six areas that were potential sources of pollution, the former Assembly Building, and five additional areas that were identified in 1995. These investigations and the results are discussed in numerous reports that PACCAR has submitted to the Board. These investigations are also summarized in a PACCAR report entitled "Evaluation of Shallow Zone Groundwater Remediation" dated January 1996.

   The investigation and remediation activities performed at the site include removal of underground fuel storage tanks, removal of subsurface chemical and wastewater conveyance pipelines, closure of a wastewater treatment plant and an aboveground tank farm area, excavation and removal of soils in several areas that were found to be impacted with organic chemicals, installation of soil borings and collection of soil samples, installation of groundwater monitoring wells and performance of routine groundwater monitoring. In addition, a groundwater extraction and treatment system was constructed to clean up polluted groundwater at two former source areas. Five groundwater extraction wells were operated between December 1991 and September 1995, and a total of approximately 2,300,000 gallons of groundwater including 34 lbs of total petroleum hydrocarbons as diesel (TPHd), 14 lbs of Total Petroleum Hydrocarbon as gasoline (TPHg), 2 lbs of benzene, and less than 0.5 lbs each of toluene, xylenes and ethylbenzene were removed by these wells.

   Through these investigations, the chemicals of concern at the site were found to be benzene, toluene, ethylbenzene, xylenes, TPHd and TPHg. Chlorinated solvents, including 1,2-Dichloroethane (1,2-DCA) and 1,1-Dichloroethene (1,1-DCE), 1,2-Dichloropropane (1,2-DCP) have also been detected at low concentrations in groundwater samples collected from monitoring wells near the former source areas.

   Over the last 14 years, concentrations of chemicals like 1,2-DCA and Benzene have been reduced

from over 20 ppb and 2,900 ppb to 4 ppb and 150 ppb, respectively. However, these residual levels are persistently exceeding their water quality objectives (Maximum Contaminant Levels). Additionally, up to 7,000 ppb and 8,000 ppb of TPHg and TPHd, respectively, are still detected in groundwater despite some reduction in these chemical concentrations occurring over the last six years. Persistence of these chemicals in groundwater indicates that neither active remediation nor in-situ bioremediation will clean up the pollution within a reasonable time frame.

7. **Basis for Soil Cleanup Standards**: Remedial actions completed to date have effectively removed soils identified as potential sources of groundwater pollution (*ref. Evaluation of Shallow Zone Groundwater Remediation Report*). Groundwater pollutant levels have remained stable or decreased since source removal was completed. Threats to human health and the environment due to any residual pollutants in soil are considered insignificant.

8. **Risk Assessment**: A risk evaluation was conducted to assess the human health and ecological risks due to residual levels of chemicals present in soil and groundwater at the site (*ref. Evaluation of Shallow Zone Groundwater Remediation Report dated January 1996*). Board staff concurred with the conclusion of the evaluation that the residual levels of chemicals at the site would not pose any significant human health risk due to the low concentrations of residual chemicals present at the site. Other probable exposure pathways will be eliminated by implementing appropriate institutional controls of the property within the containment zone. The institutional controls contained in the CZMP are considered appropriate and adequate to limit potential on- and off-site exposures to the residual chemicals in groundwater.

9. **Board Resolution No. 89-39**: Board Resolution No. 89-39, "Sources of Drinking Water" defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels. Although the shallow zone groundwater underlying and adjacent to the site is not currently used for drinking water supply, it does qualify as a potential source of drinking water. The Basin Plan specifies that MCLs shall be the water quality objectives.

10. **State Water Resources Control Board (SWRCB) Resolution No. 96-79**: SWRCB Resolution No. 96-79 "Adoption of Containment Zone Policy," which is an amendment to Resolution No. 92-49 "Policies and Procedures for Investigation and Cleanup and Abatement of Dischargers under Water Code Section 13304" was adopted on October 2, 1996 and approved by the Office of Administrative Law on January 13, 1997. The site and the proposed containment zone are not located in a critical recharge area as defined in Section III.H.3.d. of the amended Resolution No. 92-49.

11. **Basis for Containment Zone Designation**: Because (i) the fine-grain type of sediment below the site has substantially hindered the pollutants' migration, (ii) the residual groundwater pollution is limited within the proposed containment zone area, (iii) no other cost-effective technologies at this time are available to reduce the residual chemical concentrations in groundwater to the cleanup levels of MCLs, (iii) adequate pollutant source has been removed from the site, (iv) and the Alameda County Water District (ACWD) has expressed concern about the lack of significant in-situ bioremediation of the residual chemicals and the potential long-term effects of these chemicals on the Newark Aquifer if they are not at least managed pursuant to the Containment Zone Policy, PACCAR determined that it would be appropriate to recommend to the Board to manage the residual chemical pollution under a Containment Zone.

On August 5, 1996, PACCAR submitted an application for designating a portion (3.44 acres) of the 36.5-acre site as a Containment Zone. In the subsequent process of evaluating PACCAR's application, Board staff have continuously worked with PACCAR and ACWD on the details of the CZMP. The CZMP contains six sections including background information, comprehensive procedures and requirements for the implementation and management of the Containment Zone. These include the institutional controls, site operation and maintenance program, groundwater monitoring program, data evaluation, and contingency plan for remediation.

As required in the amended Resolution No. 92-49, Board staff invited the Technical Advisory Committee (TAC) members to attend a meeting on July 8, 1997 discussing the proposed designation of containment zone. Representatives of agencies attending included ACWD, City of Newark, Department of Toxic Substances Control, USEPA, and Department of Health Service - Drinking Water Branch. Based on these agencies' comments and recommendations, PACCAR revised the CZMP, and resubmitted it to the Board and the participating TAC members on August 25, 1997. In view of the minimal impacts of the proposed Containment Zone on the environment and human health, and considering that their concerns and recommendations have been addressed by the Dischargers and Board staff in the CZMP and this Order, the TAC members did not consider further meeting for the site to be necessary.

In complying with the public notification requirements, public notices were advertised in a local newspaper (Fremont Argus) on July 9 and August 7, 1997, respectively, notifying the Board's intention to designate a Containment Zone on a portion of the site. Additionally, the same notice was sent to the property owners and tenants within 500 feet of the site. No objection to the proposed designation has been received from the public in response to these notices.

Board staff have also worked with Georgia-Pacific on the details of the proposed deed restriction as an institutional control for the Containment Zone area on the property. Considering the land use of the site, a restriction of drilling any wells in the shallow zone for drinking water purpose and any construction and other activities causing the residual pollutants to migrate outside the Containment Zone, and the regulatory controls and requests by this Order are considered adequate to protect human health and the environment.

Any remaining risks to human health, water quality, and the environmental posed by residual soil and groundwater pollution will be contained and managed as required by this Order. Considering reasonable costs and incremental benefits, it is neither technically nor economically feasible for best available technologies at this time to achieve further significant reductions in groundwater pollutant concentrations or mass.

Based on the above, and in consideration of the reasonable protection of groundwater's beneficial uses consistent with the maximum benefit to the people of the State, Board staff concur that a limited containment zone within the site is appropriate to manage the residual pollution in groundwater. Within this containment area, pollutant concentrations may exceed relevant water quality objectives, as long as they are contained, as specified in this Order and SWRCB Resolution No. 92-49 as amended.

12. **Basin Plan**: The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the

State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

The potential beneficial uses of groundwater underlying and adjacent to the site include:

a. Industrial process water supply
b. Industrial service water supply
c. Municipal and domestic water supply
d. Agricultural water supply

The existing and beneficial uses of Alameda Creek, San Francisco Bay, and contiguous surface waters include:

a. Water contact and non-water contact recreation
b. Wildlife habitat
c. Freshwater habitat
c. Agricultural Supply
d. Fish migration and spawning
e. Navigation

13. **CEQA**: The SWRCB approved a Functional Equivalent Document (FED) that is a "program" environmental document when it adopted the Containment Zone Policy. This document was prepared to meet the requirements of the California Environmental Quality Act (CEQA).

The Functional Equivalent Document (FED) associated with the Containment Zone Policy contemplated impacts to the community and the environment resulting from the policy's implementation. No additional impacts beyond those contemplated in the FED are anticipated to occur as a result of adoption of a containment zone at this site.

Based on (i) the review of the information collected from the site investigation and remediation, (ii) the current and future use of the site, (iii) the unlikelihood of using the shallow zone water for drinking water, and (iv) the regulatory controls and requests of this Order, Board staff concur that the impact to the community and the environment from the residual pollution is negligible.

14. The prohibitions, specifications and provisions for this Order are based on the plans and policies of the Basin Plan, EPA water quality criteria, and best professional judgment.

15. The Dischargers have caused or permitted, or threaten to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.

16. Pursuant to Section 13304 of the Water Code, the Dischargers are hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

17. The Board has notified the Dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.

18. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code and regulations adopted thereunder, that the Dischargers, their successors and assigns, shall comply with the following:

A. PROHIBITIONS

1. The release of wastes or hazardous material in a manner which will degrade, or threaten to degrade, water quality or adversely affect, or threaten to adversely affect, the beneficial uses of the waters of the State is prohibited.

2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. A containment zone is defined as a specific portion of a water bearing unit where the Board finds, pursuant to Section III.H of amended SWRCB Resolution No. 92-49, it is unreasonable to remediate to the level that achieves water quality objectives. The Board hereby designates the area shown in the attached Figure 2 as a Containment Zone. Because the thickness and depth of the shallow zone and the Newark Aquitard vary, the effective vertical extent of the Containment Zone is limited to 45 feet bgs. The size of the Containment Zone is limited in its extent based on the consideration of the residual pollution.

2. The water quality objectives established at the boundary of the Containment Zone, and the in-zone limits which are established based on human health risk assessment for the area within the containment zone are as follows:

Chemicals	Groundwater Quality Objective	In-Zone Limits
Benzene	1 ppb, Cal MCL	700 ppb, risk-based
Toluene	150 ppb, Cal MCL	200,000 ppb, risk-based
Ethylbenzene	700 ppb, Cal MCL	500,000 ppb, risk-based
Xylenes	1,750 ppb, Cal MCL	400,000 ppb, risk-based
1,2-DCA	0.5 ppb, Cal MCL	700 ppb, risk-based
1,1-DCE	6 ppb, Cal MCL	50 ppb, risk-based
1,2-DCP	5 ppb, Cal MCL	3,000 ppb, risk-based

Objectives for TPHg (100 ppb) and TPHd (500 ppb) have been established on a site-specific basis in concurrence with the Dischargers and Alameda County Water District.

In-zone limits for TPHg and TPHd are not necessary, and have not been established.

3. The water quality objectives must be met in the boundary wells which include a deep well in the Newark Aquifer, and the in-zone limits shall not be exceeded. Should exceedance of these water quality objectives or in-zone limits be confirmed, appropriate contingency actions as described in the CZMP or, if deemed necessary, as requested by the Executive Officer, shall be implemented accordingly to restore the containment status.

4. Changes or modifications of the CZMP may be made with approval of the Executive Officer.

5. The storage, handling, treatment or disposal of soil or groundwater containing pollutants shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

6. If additional groundwater extraction and treatment is considered as an alternative, the feasibility of water reuse or disposal to the sanitary sewer must be evaluated. Based on Regional Board Resolution 88-160, the Dischargers shall optimize, with a goal of 100%, the reclamation or reuse of groundwater extracted as a result of cleanup activities. The Dischargers shall not be found in violation of this Order if documented factors beyond the Dischargers' control prevent the Dischargers from attaining this goal, provided the Dischargers have made a good faith effort to attain this goal. If reuse is part of a proposed alternative, an application for Waste Discharge Requirements may be required. If discharge to waters of the State is part of a proposed alternative, an NPDES permit application must be completed and submitted, and must include the evaluation of the feasibility of water reuse and disposal to the sanitary sewer.

C. TASKS

1. IMPLEMENTATIONOF CONTAINMENTZONE MANAGEMENTPLAN (CZMP)

COMPLIANCE DATE: October 31, 1997

Submit a technical report acceptable to the Executive Officer documenting the completion of implementation of the CZMP including the execution and recordation of the deed restriction and other institutional controls as described in the CZMP. The deed restriction shall describe the type(s) of restriction on the use of the containment zone area of the property, and it must be duly signed by the dischargers, and filed with the Alameda County Recorder's Office.

2. ANNUAL REPORT ON CZMP IMPLEMENTATION

COMPLIANCE DATE: JANUARY 31, 1999, and annually thereafter

Submit a technical report acceptable to the Executive Officer documenting the status of the CZMP implementation and any changes to the CZMP throughout the preceding year. It shall also describe, at minimum, the activities that have been performed in complying with the requirements and procedures of this Order and the CZMP, any changes in land

ownership and property use, a summary of groundwater quality data violating the prescribed water quality objectives or in-zone limits and actions taken or proposed to restore the containment status, and a review of any changes in the local water supply practice to assess if it will affect the status of the containment zone.

3. **EVALUATION OF NEW HEALTH CRITERIA**

COMPLIANCE DATE: If necessary, 90 days after requested by Executive Officer

The Executive Officer may request submission of a technical report acceptable to the Executive Officer evaluating the effect of revising one or more water quality objectives or in-zone limits of this Order in response to adoption of new drinking water standards, maximum contaminant levels, other health-based criteria, or ecological criteria.

4. **FINAL STATUS REPORT**

COMPLIANCE DATE: At the request of Executive Officer

Submit a technical report acceptable to the Executive Officer evaluating the effectiveness of the CZMP including the designated containment zone. The report may be combined with the annual monitoring report, and shall include:

a. Summary of effectiveness in controlling contaminant migration and protecting human health and the environment.
b. Comparison of contaminant concentration trends with cleanup standards.
c. Evaluation of the CZMP associated with the containment zone, and recommendation of appropriate regulatory actions regarding the site cleanup and management and future use of the Containment Zone.

D. PROVISIONS

1. Delayed Compliance: If the Dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the Dischargers shall promptly notify the Executive Officer and the Board may consider revision to this Order.

2. All hydrogeologic plans, specifications, reports and documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist or a California registered civil engineer.

3. The Dischargers shall comply with any Self-Monitoring Program as adopted by the Board and as may be amended by the Executive Officer.

4. The Dischargers shall notify the Board in writing at least 30 days in advance of any changes in occupancy or ownership associated with the site described in this Order.

5. The Board will review this Order periodically and may revise the requirements or compliance schedule when necessary.

6. Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to Alameda County Water District and City of Newark-Fire Department.

7. The Dischargers shall be liable, pursuant to Section 13304 of the Water Code, to the Board for all reasonable costs actually incurred by the Regional Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any disputes raised by the Dischargers over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

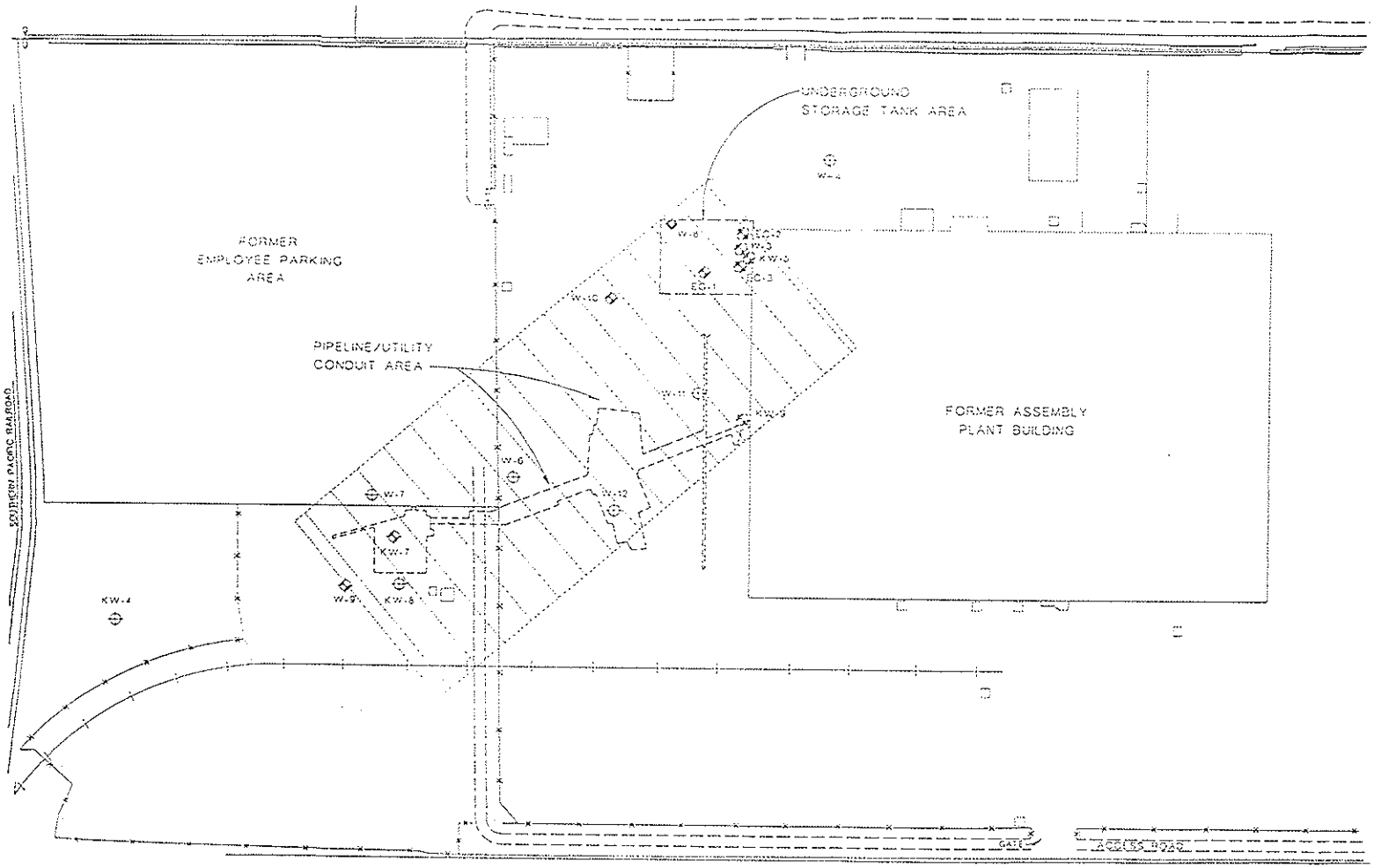
8. If the required actions delineated in the CZMP are not implemented, or appropriate access is not granted by the Dischargers to the Regional Board for purposes of compliance inspection in accordance with Water Code Section 13267(c), or violation of groundwater quality objectives or in-zone limits occurs with no appropriate response actions taken by the Dischargers to restore to pre-violation conditions of the containment zone, and that violation is attributable to the discharge in the containment zone, the Board may revoke the contaminant zone and take the appropriate enforcement action against the Dischargers.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on September 17, 1997.

Loretta K. Barsamian
Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350 OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments: Site Map with Containment Zone
Self-Monitoring Program
Containment Zone Management Plan (maintained at the Regional Board Office)
Resolution No. 92-49 Checklist (maintained at the Regional Board Office)



N

0 40 80 120

Approximate Scale in Feet

Legend:

- EC-2 — Shallow Zone Monitoring Well Included in Long-term Monitoring
- W-12 — Shallow Zone Monitoring Well Not Included in Long-term Monitoring
- W-8 — Newark Aquifer Well Included in Long-term Monitoring
- Extraction Well Included in Long-term Monitoring
- Containment Zone (See Note 2)

Notes:

1. All locations are approximate.
2. Some wells in this area do not have chemically-impacted groundwater.

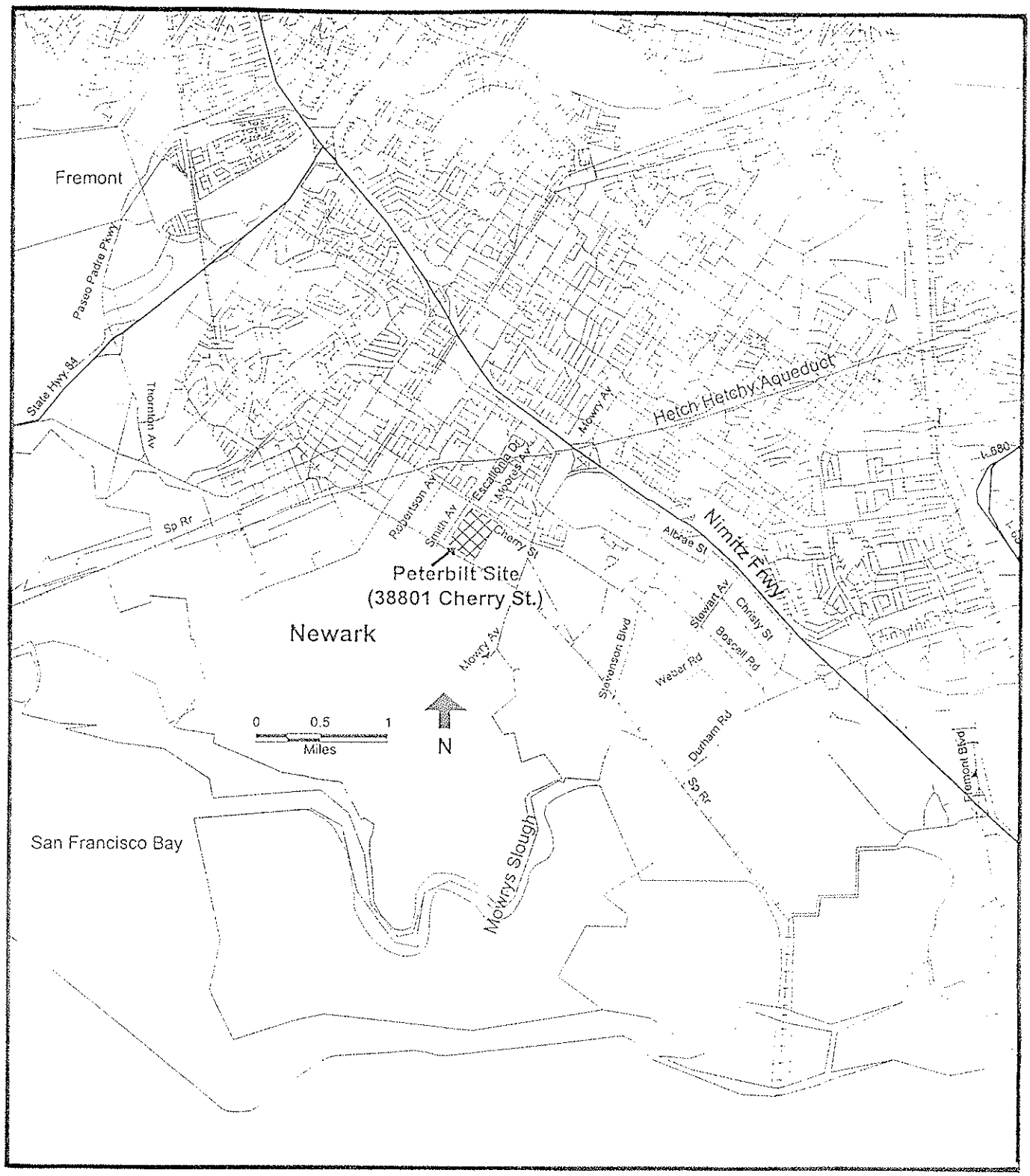
Kennedy/Jenks Consultants

Peterbilt Motors Facility
Newark, California

Containment Zone
and Groundwater monitoring Wells

August 1991

FIG. 2 PROPOSED CONTAINMENT ZONE AREA



Kennedy/Jenks Consultants

Peterbilt Motors Facility
Newark, California

Location Map

K/J 940075.31
August 1997

Figure 1

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

PACCAR INCORPORATED, AND
GEORGIA-PACIFIC CORPORATION

for the property located at

38801 CHERRY STREET
NEWARK
ALAMEDA COUNTY

1. **Authority and Purpose**: The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 97-114 (site cleanup requirements).

2. **Monitoring**: On a semi-annual basis, the Dischargers shall measure groundwater elevations, sample monitoring and extraction wells, and analyze groundwater samples for the same constituents according to the CZMP and any subsequent amendments to the plan.

   The Dischargers may propose changes of the monitoring program; any proposed changes are subject to Executive Officer approval.

3. **Monitoring Reports**: The Dischargers shall submit semi-annual monitoring reports to the Board no later than 30 days following the end of the half-year. The first semi-annual monitoring report upon the adoption of this Order shall be due on January 31, 1998. Groundwater monitoring should be performed in May and November, respectively, each year unless otherwise stated. If a monitoring report's submittal date is coincident with another report submittal (e.g. as required by one of the compliance tasks in the Order), the Dischargers may combine the reports into one for submission. The monitoring report shall include:

   a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by either Discharger's or both Dischargers' principal executive officer(s) or his/her duly authorized representative(s), and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

   b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the report.

   c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form,

and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical methods used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the report. The report shall describe the monitoring activities, report on the condition of all wells and the existing groundwater remediation systems, and discuss the compliance status with respect to the CZMP requirements. Supporting data, such as laboratory data sheets, need not be included (however, see record keeping - below).

d. Groundwater Extraction: If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the reporting period. The report shall also include contaminant removal results, from groundwater extraction wells, expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the report.

4. **Violation Reports**: If the Dischargers violate requirements in the Site Cleanup Requirements, then the Dischargers shall notify the Board office by telephone as soon as practicable once the Dischargers have knowledge of the violation. Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five (5) working days of telephone notification.

5. **Other Reports**: The Dischargers shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation. Additionally, any reports required per the CZMP shall be submitted according to the schedule established in the CZMP.

6. **Record Keeping**: The Dischargers or their agents shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six (6) years after origination and shall make them available to the Board upon request.

7. **SMP Revisions**: Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the Dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on September 17, 1997.

Loretta K. Barsamian
Executive Officer